

Amendments to the Claims:

Claims 1 through 14 (Cancelled)

1 15 (Currently Amended) A system for transmitting a loopback cell within a switching
2 node of an ATM connection, said switching node including a first adapter having
3 associated ports and a second adapter having associated ports, wherein said
4 loopback cell enters said switching node by a first adapter port, said system
5 comprising:

6
7 processing means within said switching node for detecting a loopback
8 condition when an ATM cell enters said first adapter;

9
10 a routing header function for appending a routing label to said ATM cell
11 indicating that said ATM cell is a loopback cell to be looped back on said ATM
12 connection. The system of Claim 12, wherein said routing label is being appended to
13 said loopback cell only if a loop control bit is set by a control point of said switching
14 node within said first adapter, and

15
16 a switching engine for transferring said loopback cell to said first adapter port
17 utilizing said appended routing label.

1 16 (Original) The system of claim 15, further comprising processing means for setting
2 said loop control bit within said first adapter.

1 17 (Original) The system of claim 15, further comprising processing means for adding
2 a loopback flag to said loopback cell if said loop control bit is set, wherein said
3 loopback flag serves as an indicator for a protocol engine within said first adapter that
4 said routing labels have to be appended to said loopback cell.

Claim 18 (Cancelled)

1 19 (Currently Amended) A system for transmitting a loopback cell within a switching
2 node of an ATM connection, said switching node including a first adapter having
3 associated ports and a second adapter having associated ports, wherein said
4 loopback cell enters said switching node by a first adapter port, said system
5 comprising:

6
7 processing means within said switching node for detecting a loopback
8 condition when an ATM cell enters said first adapter;

9
10 a routing header function for appending a routing label to said ATM cell
11 indicating that said ATM cell is a loopback cell to be looped back on said ATM
12 connection, ~~The system of Claim 12,~~ wherein said routing label includes including a
13 switch routing label for identifying said first adapter as the output adapter from which
14 said loopback cell will exit said switching node, and

15
16 a switching engine for transferring said loopback cell to said first adapter port
17 utilizing said appended routing label.

1 20 (Currently Amended) A system for transmitting a loopback cell within a switching
2 node of an ATM connection, said switching node including a first adapter having
3 associated ports and a second adapter having associated ports, wherein said
4 loopback cell enters said switching node by a first adapter port, said system
5 comprising:

6
7 processing means within said switching node for detecting a loopback
8 condition when an ATM cell enters said first adapter;

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9 a routing header function for appending a routing label to said ATM cell
10 indicating that said ATM cell is a loopback cell to be looped back on said ATM
11 connection; and
12
13 a switching engine for transferring said loopback cell to said first adapter port
14 utilizing said appended routing label ~~The system of Claim 12; and~~ wherein
15
16 the ATM header virtual path/virtual circuit of said loopback cell is not swapped
17 by the protocol engine of said first adapter before said loopback cell is transmitted
18 over said ATM network by said first adapter port.